

Expedition Camping Guide – DoE Bronze / Silver

This is a quick guide to expedition camping, useful for DoE Bronze and above. We encourage Explorers to practice camping skills in a supervised, safe and controlled manner before heading off into wilder country.

This guide is written ONLY for UK three seasons camping on farmland, managed woods, Scout sites, public camp sites, private gardens and similar at low levels (under 500m) and within a 30 minute walk of a paved road. While this is a good start, significant additional skills are needed to camp overseas, remotely, in wild areas, at altitude, or when temperatures fall below freezing. Explorers take responsibility for their own safety!

This guide should be enough for most Unit camps, DoE Bronze and Silver and some shorter expeditions. On an expedition, you could just get tired, slap down a tent, and crawl in. We don't recommend that: nights and mornings can bring some horrible surprises to those who do... Using this guide might seriously enhance your enjoyment, safety, sleep and ease of camping!

Good camp craft starts with good preparation. It ends with a clean site exit and a safe return home.

Here is a quick pre-camp checklist:

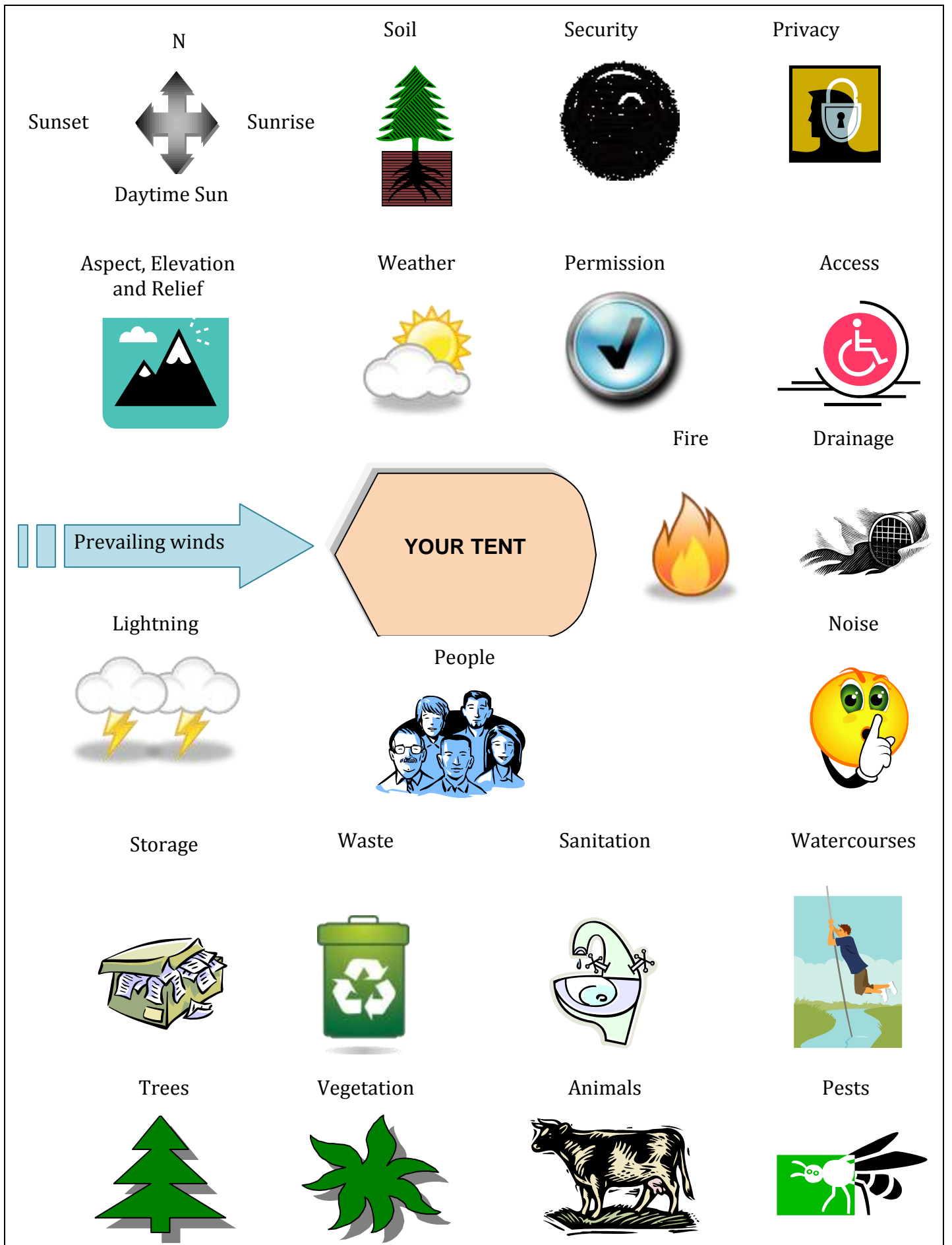
Prepare	get permissions, maps, site visits and other planning done first. tell the right people where you will be. choose the right kit for the event, and pack it properly.
Select	carefully select an area on the site using the guide below. balance the factors you see, feel, and expect.
Contingency	be prepared to move at any time. stay packed and 'light'.
Exit	plan to leave cleanly – “take only photographs, leave only footprints”.

Within that framework, the rest of this guide is all about what to do once at the site. Just remember that an accident, getting lost, or changes in the weather can suddenly mean you need to pitch camp without pre-booking a site. The checklist and discussion below can really help you, because moving a tent just a few metres can make all the difference, for good or bad.

Which Tent?

Having a good tent is part of the battle won before you set out. Expedition tents have never been so technically advanced, nor such good value for money. Here is a break-down of features to look out for when picking out a tent:

- Ultralight tents may weigh less than 2kg (4.4lbs). At Bronze DoE, merely “light” is enough: say 5kg between 3 people.
- Is the tent 1 or 2 skin? (i.e. does it have an inner and an outer tent, or just an outer?) One-skin tents are for very serious ultralight expeditions and are really not needed or robust enough for DoE use. One-skin tents also suffer badly from condensation unless you are an expert in their use.
- Note, a heavier 3 person tent might mean you each carry less weight than a lighter 2 person tent; do the maths before you leave and weigh the parts yourself on sensitive scales.
- Know your weights. Minimum weight is usually the inner tent, flysheet and tent poles only. Packaged weight usually includes the inner tent, flysheet, tent poles, tent pegs, tent stuff-sack, pole bag, peg bag, guy lines and repair items. Take only what you really need to carry.
- Does it have light aluminium, titanium or alloy tent poles (which is where a lot of weight is saved)? Do those poles configure to maximise space and allow for sleeping, cooking and gear storage.
- Can you sit up in it to change, or will you have to hop outside to put clothes on?
- Have you got the right number of pegs to pitch it properly (plus 1 as a ‘puller’ and to cover losses). Are they light?
- Is the tent's inner or outer pitched first? In wet spells you want to pitch the outer first, but inner first is easier...
- Is it tough enough on the ground? Check the groundsheet, and if you have ANY doubts, pack a footprint or a couple of large plastic dustbin bags to use as ground protectors underneath it. Ultralight tent groundsheets can be destroyed by thistles or even stubbly grass, leading to a wet night!
- Flysheet vents – can you improve airflow and ventilation to reduce condensation? Even better variable airflow vents top and bottom so you can control the warm and cold air exchange inside the tent and help to reduce condensation and stuffiness in the morning.
- Can you repair it if it goes wrong or is torn? (Take gaffer tape, glue and bit of repair fabric?)



Note	More Details
Permission	<p>Are you allowed to camp here? Booking in advance and double checking the map reference is a good start. A 'pre-visit' by car to check the site out is even better. Checking in with the owner or site warden is usually essential. In wilder areas there are many places you are allowed to camp, but read up on local regulations and check with a leader beforehand.</p> <p>The team leader should have all relevant permissions in paper copy in waterproof packing.</p>
Orientation	<p>The compass tells you a lot. In the UK you can expect sunrise from the South East and that will warm the tent and dry off the condensation quickly, though it will wake you early with brightness. Evening sun, from the South West can make the tent hot and stuffy at night (though, as ever in the UK, it will cool fast after sunset.)</p> <p>Look up and around – are there high mountains, trees or structures that will affect your light and prevailing conditions.</p> <p>Orientation also affects winds (see below).</p>
Aspect, Elevation, Relief	<p>How high are you? For Bronze you are probably staying under 500m, which means no special knowledge is required to camp. Even on lower terrain, you still need to stop, stand still and then look all around you. Then get down closer to the ground and repeat that 'look around'. Use the whole team to survey the site. The team leader should consider:</p> <ul style="list-style-type: none"> • Which way does it run, and which way does the site face? Why does it slope, and what does that mean to you? Will it mean an uncomfortable night with your head below your feet, or a night spent sliding off your mattress? • What is above and below you? Might trees, rocks, or other hazards run down over you? • Is the ground really flat? Can you find a spot on the site that is better to camp on? Consider not just the big factors of site aspect, elevation and relief, but the local "micro" factors that can make a huge difference. A bump just 5cm high can change everything. As can a dip, just 5cm deep. One will keep you safe and dry; the other can become a pond in minutes. <p>A good place to camp is near the top edge of a gentle slope, on a rise or bump that enables water to flow around you and your head to be slightly above your feet when you sleep.</p>
What Tent	<p>Shape? Size? Will it fit on this site, will the pegs hold and can you get in and out?</p>
Weather	<p>It changes. Normally overnight. You will, of course, have checked the weather forecasts, but will you remember to update your knowledge by looking up at clouds, winds and sun during the day and into the evening? Prepare for change. Discuss and consider the weather among the team. The team leader will make the call to adjust camping to the weather.</p>
Winds	<p>In the UK, prevailing winds are Westerly, and in the summer, South-Westerly. In Spring and Summer these winds are 'moist' and changeable. However, local conditions can greatly change the wind patterns. Can you work out where they are for this site, and how do you know? Try looking at trees, lichens, bushes, rocks, and the 'lay' of the grass. If not ask someone.</p> <p>Winds deflected up and over hills gain speed and power. Never camp right on the top of a hill, and try to avoid the windward side. Being at least 5m below the summit on the lee side is a good aim, or use other local shelter, such as rocks, bushes and trees (where safe).</p> <p>Always – always – pitch your tent 'aerodynamically': normally this means with the lower 'tail end' into the wind and the door away from the windward side.</p> <p>Winds also greatly affect your ability to cook. Never – ever – be tempted to cook inside your tent or even using the tent as windbreak. It is amazingly easy to burn a hole in a modern tent, and spilling hot food on it can trash the waterproofing in a second. Worse, you will be seriously injured by the almost explosive burning of a tent if you are in it. Move away to cook, and build a windbreak of kit or people or local rocks / plants.</p>
Soil	<p>Get down and feel it with your hands, as a team. Is it sand, clay, loam, peat, turf, pine needles, soft, hard, rocky, lumpy, wet, dry or full of ants? All of those factors can affect your camping. Experience is your main guide, but do not be tempted to pitch on soft springy soil as this will be the first to waterlog and may harbour other hazards. Find something slightly more solid, or move into the woodland edge if you can. You can move smaller rocks, but modern mattresses can soak up most defects below you at night.</p> <p>Do walk all over the area you want to pitch on for few minutes as this will reveal any sharp</p>

Note	More Details
	objects or 'sinky bits' that you can remove or avoid.
Watercourses	<p>It is tempting to camp on a river bank, or beach. DON'T. Always stay 100m away, uphill. You can walk to the water, but you don't want it coming to you while you sleep. Rivers can flood in seconds, flowing water is noisy, lakes can fill or boats create washes, biting insects live in small areas of still water, and all of those things are either dangerous or will ruin your night.</p> <p>If you are uphill from a canal, this can be pleasant, but the anti-pollution rules still apply.</p> <p>Critically you should never dispose of any form of waste within 100m of a watercourse as an anti-pollution rule. (see: waste).</p>
Drainage	<p>What if it rains really hard? Will water run down over the site, or will it flow around you (see aspect, elevation and relief). Will a sandy soil allow water to drain, will it run over the top (as on clay), or turn into a sponge (loams and peats)?</p> <p>Are their indications as to where water goes, in the form of drain holes, ditches, field drain lines or areas marked by animal tracks?</p>
Security	<p>Do you feel safe? Trust your instincts first. If you don't feel safe, don't camp.</p> <p>Is the site fenced? Is there public access? Is there a warden? Is there a house or farm that can see you? Are you near an urban area? Have you asked locally for any security risks that exist?</p>
Privacy	<p>How private is this spot? Can you cook, change and wash without being overlooked? Can you have fun without attracting public onlookers to join in if you wish?</p>
Noise	<p>Is it quiet enough to sleep? What noises can you hear from roads, water, animals, people, houses, factories, generators or (worst of all) other campers?</p> <p>Does the site (usually a public site) have "quiet time" rules after a certain time? (And do you really think the campers you saw will obey those rules?)</p>
Access	<p>Can you get in and out in a hurry? Could an ambulance?</p>
Fire!	<p>Can you cook and have a camp fire somewhere safe? By safe, I mean at least 10m away from a tent, downwind, for an open fire, and at least 5m away from a tent with a stove. It is not just the risk of ignition, but the evil little holes caused by sparks and embers that will lead to leaks and miserable camping when it rains.</p> <p>For safety reasons, no tents should be within 2 metres of each other. In simple terms: guy lines should never overlap.</p>
Storage	<p>Can you store food and kit safely? You may have a vestibule in the tent, but you may prefer to put your rucksacks in a survival bag and put them out at night (with clothes for the morning underneath your sleeping bag but on top of the mattress for extra warm and dryness.</p> <p>If you have food, make sure it is sealed, and preferably hung at least 1m above ground overnight.</p>
Waste Disposal	<p>Simple rule: pack it in bags and take it with you. All of it.</p> <p>Liquid wastes go in a pit, which you fill and cover before you leave. If you can, build a wet pit strainer from a carrier bag filled with leaves / grass to filter out food wastes. Dispose of the filter properly.</p> <p>If the site provides waste disposal, use it as directed. Farmers will often have both wet and dry disposal areas.</p>
Sanitation	<p>You really do need to wash hands several times a day and always before cooking, before eating and after going to the loo. Being sick at camp is just not at all funny. Worse, making your team sick could rapidly become very serious indeed.</p> <p>Face wipes, alcohol hand gels, gel soaps and body wipes have all made hygiene at camp lighter, easier and safer. Explorers no longer have an excuse to smell bad, though they may give up shaving for a day or two.</p> <p>For Bronze DoE your sites are either expected to have toilets, or the leadership will install chemical loos ahead of the visit and arrange disposal. You are not required to have 'green field' skills for Bronze DoE. However, if you are 'caught short' the following rules apply:</p>

Note	More Details
	<ul style="list-style-type: none"> • Find somewhere private, off any tracks, and with cover. • Dig a hole, use it. • Bury faeces, and put rocks or sticks on top. • Mark the ground as 'foul', with a cross of sticks laid over it and pegged with other sticks. • Burn toilet paper if you have a fire. • Never bury used sanitary goods – always wrap and carry them out of the site.
Trees	<p>Trees are both friend and enemy. Look up. Make sure no branches are within 'falling distance' of you or your tent.</p> <p>Look across: can you use trees as a safe windbreak, or do you risk being caught in the lee-side vortex as winds howl over the tree line?</p> <p>Look around: is there fuel for fire and somewhere to have it?</p>
Vegetation	<p>Thistles, Nettles, Hogweed, Briars, can all ruin your day, and your tent. Overseas, get local guides to stinging and toxic plants. Anything with thorns is a real hazard, doubly so if farmers have cut the hedge and left thorns on the ground where they can tear ground sheets and even injure you as you sleep.</p> <p>Tall grass and weeds are wet at night, and can hide hazards and animal visitors. On the plus side, it is comfy to camp on and provides privacy (but at the risk of a fire hazard), so stamp it down for at least 2m around you if you can do so without ruining the site for future visitors.</p> <p>Don't eat things you find unless the whole team is unanimous that they have identified them as good and safe to eat. Many experienced campers safely enjoy autumn berries, leaves, mushrooms, bark, eggs, fruits and juices from nature. Sadly, others are made ill, killed, or break the law due to lack of knowledge.</p> <p>Simple recognisable fruits in small portions are fun and safe in the UK, but most 'single berries' and all fungi are best avoided until you really know what you are doing.</p>
Animals	<p>Animals love campers. Especially after dark. They are noisy and inquisitive, though in the UK none are really dangerous (except pet dogs, which are a serious and very real hazard if you camp where dog walkers go). Many camps are, however, ruined by foxes, badgers, hedgehogs, deer, cows, sheep, cats and dogs – all of whom adore camp food and will tear through bags to get at it. It is not funny to wake to find your sausages gone.</p> <p>Also, animal faeces are to be avoided. You probably guessed that. Ditto slurry pits and stinking manure heaps upwind of your site.</p>
Pests	<p>Ants, bugs, wasps, mosquitoes, midges, sand flies, horse flies, irritant caterpillars, and 'dung flies' can all ruin your days and nights. Your first defence is to avoid where they live. That means avoiding marshes, still water and thick hedgerows. Look around on your approach and avoid farms with animals or manure heaps / slurry pits. Look around for ants and caterpillars, and listen for bees and wasps. All are most evident in the early evening, as you camp, so should be obvious. Simply move at least 50m away.</p> <p>Then wear a good, DEET based repellent and keep it topped up. (Note on DEET: it instantly destroys tents, waterproofing and most plastics. Never put it on in a tent, always outside. Do not touch tents or waterproof items until you have wiped or washed your hands after applying it. Top it up every 4 to 6 hours. As far as I know, no natural repellents really work, no matter what Granny said. Citronelle, homeopathy, Avon Skin-so-Soft and Marmite are all bug-repellent myths and you will get bitten worse if you rely on them)</p>
Neighbours	<p>The biggest single hazard at camp is the human being. You read the bit about security above, of course, but our strong advice is not to camp where you can see or hear any people you don't know personally.</p>
Physical hazards	<p>Before the sun sets do one last tour of the site to check for physical hazards: wire, power, drains, pits, fences, pylons, and anything that might move to cause an injury or present a risk when moving out at night (i.e. to go to the loo). If you can mark it with something that has high contrast at night, even better. (You may even have a glow stick for that purpose)</p>

Lightning at camp

Lightning is very rare, and you are hugely unlikely to be struck by it, even when camping. Lightning can also be terrifying, and if you are struck, it can be fatal. Good campers bear in mind some rules:



First point: Know the weather patterns of the area. For example, in mountainous areas, thunderstorms typically develop in the early afternoon, so plan to hike early in the day and be down the mountain by noon. Know the weather forecast. Carry a portable radio get forecasts on your phone. If there is a high chance of thunderstorms, curtail your outdoor activities. Do not hesitate to 'bail out' if the weather changes and lightning is coming. You can always hike another day ... unless you get fried by lightning.

Second point: travel safe. If you see threatening skies in the distance and you are passing a safe location, pull over and wait 30 minutes after the last thunder crack. If you can turn around and get away from the storm, do so! **DO NOT** walk, ride, cycle, drive or sail into a lightning storm!

Third point: camp safe. Do not place your campsite in an open field on the top of a hill or on a ridge top. Keep your site away from tall isolated trees or other tall objects. If you are in a forest, stay near a lower stand of trees. If you are camping in an open area, set up camp in a valley, ravine, or other low area. A tent offers **NO** protection from lightning.

Example: As you are preparing dinner on the camp stove, you hear rumbles of thunder in the distance. You look around and you see your tent is nearby, and a large picnic shelter is just down the trail. A car is about 400m away, a barn with metal roof and steel beams is in the next field. What should you and your team do? In this case, the smartest thing to do is to round up your team and decide if you have time to get to the barn first, or if not and get to the car (or minibus). The tent is **NOT** a safe place to be as it offers **NO** protection from a lightning flash. The picnic shelter is also not a safe location. It is best to remain in the enclosed building or vehicle for about 30 minutes after the last rumble of thunder is heard.

If you are caught on a site or in the open, bear these things in mind. There is NO safe place to be outside in a thunderstorm. If you absolutely can't get to safety, this section is designed to help you lessen the threat of being struck by lightning while outside.

Being stranded outdoors when lightning is striking nearby is a harrowing experience. Your first and only truly safe choice is to get to a safe building or vehicle. If you are camping, climbing, on a motorcycle or bicycle, boating, scuba diving, or enjoying other outdoor activities and cannot get to a safe vehicle or shelter, follow these last resort tips. **These will not prevent you from being hit, just slightly lessen the odds.**

- Lightning has a lethal radius on wet ground of many tens of metres. It is not just a direct strike that can kill. So get 50m away from anything that attracts lightning.
- Do **NOT** seek shelter under tall isolated trees. The tree may help you stay dry but will significantly increase your risk of being struck by lightning. Rain will not kill you, but the lightning can!
- Do **NOT** seek shelter under partially enclosed buildings
- Stay away from tall, isolated objects. Lightning typically strikes the tallest object. That may be you.
- Avoid metals. Rucksack frames, bikes, tents, and even hat brims can be metal. Metal is an excellent conductor. The current from a lightning flash will easily travel for long distances and can kill along fences and gates.
- Wet ropes can make excellent conductors. This is bad news when it comes to outdoor activity. If you are camping or climbing and see lightning, and can do so safely, remove unnecessary ropes extended or attached to you. If a rope is extended across a mountain face and lightning makes contact with it, the electrical current will likely travel along the rope, especially if it is wet. Ditto clothes lines, fences, guy lines and wet tent fabrics.

If you absolutely cannot get to a safe building or vehicle, here are some last resort choices:

- Wait out the storm below an overpass or bridge. **DO NOT** touch steel girders. Move away from metals. Remain on dry surfaces if possible. Overpasses are engineered structures and are likely to be properly grounded, so if it is struck by lightning, the electrical current will likely be channelled safely into the ground.
- Look for a bridge. Stay away from water. Stay away from any metal surfaces. Be alert for rapidly rising water.
- High tension wires: If high voltage electrical tension wires are near, you can shelter directly underneath the wire span. Do not get too close to the large metal towers - stay at least 15m away. Electric companies design these high tension wires for lightning strikes and to earth current safely.
- If lightning is in the immediate area, and there is no safe location nearby, stay at least 5m apart from other members of your group so the lightning won't travel between you if hit. Sitting or crouching is **NOT** safe but may be a last resort
- If you are caught in a lightning storm and if you feel your hairs stand on end, your skin tingle, smell ozone, or you hear crackling noises, crouch on the ground with your weight on the balls of the feet, your feet together, your head lowered and ears covered. Some experts recommend placing your hands on your forehead and your elbows on your knees to create a path for lightning to travel to the ground through your extremities rather than through your core (heart). **DO NOT** lie down flat.